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ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP)

The Code of Federal Regulations (CFR) at 40 CFR §122.48 requires that all NPDES permits specify monitoring and reporting requirements. CWC sections 13267 and 13383 also authorize the Regional Water Quality Control Board (RWQCB) to require technical and monitoring reports. This MRP establishes monitoring and reporting requirements which implement the federal and California regulations.

I. General Monitoring Provisions

A. Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring points specified below and, unless otherwise specified, before the monitored flow joins or is diluted by any other waste stream, body of water, or substance. Monitoring points shall not be changed without notification to and the approval of the Regional Water Board.

B. Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and the reliability of measurements of volume of monitored discharges. The devices shall be installed, calibrated and maintained to ensure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of ± 10 percent from true discharge rates throughout the range of expected discharge volumes. Guidance in selection, installation, calibration and operation of acceptable flow volume measurement devices can be obtained from the following references:

1. *A Guide to Methods and Standards for the Measurement of Water Flow*, U.S. Department of Commerce, National Bureau of Standards, NBS Special Publication 421, May 1975, 96pp. [Available from the U.S. Government Printing Office, Washington, DC 20402. Order by SD Catalog No. C13.10:421.]

2. *Water Measurement Manual*, U.S. Department of Interior, Bureau of Reclamation, Second Edition, Revised Reprint, 1974, 327 pp. [Available from the U.S. Government Printing Office, Washington, DC 20402. Order by Catalog No. 172.19/2:W29/2, Stock No. S/N 24003-0027.]

3. *Flow Measurement in Open Channels and Closed Conduits*, U.S. Department of Commerce, National Bureau of Standards, NBS Special Publication 484, October 1977, 928 pp. [Available in paper copy of microfiche from National Technical Information Services (NTIS) Springfield, VA 22151. Order by NTIS No. PB-273 535/5ST.]

4. *NPDES Compliance Sampling Manual*, U.S. Environmental Protection Agency, Office of Water Enforcement, Publication MCD-51, 1977, 140 pp. [Available from the General Services Administration (8FFS), Centralized Mailing Lists Services, Building 41, Denver Federal Center, CO 80225.]

C. Monitoring must be conducted according to U.S. EPA test procedures approved at 40 CFR Part 136, Guidelines Establishing Test Procedures for the Analysis of Pollutants

under the Clean Water Act as amended, unless other test procedures are specified in Order No. R9-2006-0043 and/or in this MRP and/or by the Regional Water Board.

D. Duplicate copies of the monitoring reports, signed and certified as required by *State and Federal Standard Provisions – Reporting*, E.2 (see Attachment C of Order No. R9-2006-0043) must be submitted to the SWRCB and Regional Water Board at the addresses listed in the *Reporting Requirements,* below of this MRP.

E. If the Discharger monitors any pollutant more frequently than required by Order R9-2006-0043 or this MRP, using test procedures approved under 40 CFR Part 136, or as specified in Order R9-2006-0043, or this MRP, or by the Regional Water Board, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the Discharger's monitoring report. The increased frequency of monitoring shall be also be reported.

F. The Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by Order No. R9-2006-0043, and this MRP, for a period of at least five years from the date of sample, measurement, report, or application. This period may be extended by request of the Regional Water Board at any time.

G. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in Order No. R9-2006-0043 or this MRP.

H. All analyses shall be performed in a laboratory certified to perform such analyses by the California Department of Health Services or a laboratory approved by the Regional Water Board.

I. The Discharger shall report all instances of noncompliance not reported under *State and Federal Standard Provisions – Reporting*, E.3, E.4, and E.5 (see Attachment C of Order No. R9-2006-0043) at the time monitoring reports are submitted. The reports shall contain the information listed in *State and Federal Standard Provisions – Reporting*, E.5. [40 CFR 122.41(1)(7)]

J. Records of monitoring information shall include:

1. The date, exact place, and time of sampling or measurements;

2. The individual(s) who performed the sampling or measurements;

3. The date(s) analyses were performed;

4. The individual(s) who performed the analyses;

5. The analytical techniques or methods used, including the method detection limit (MDL), for each analysis performed; and

6. The results of such analyses.

In addition, records of all cooling water intake monitoring, effluent monitoring, and receiving water monitoring shall include:

1. The applicable tide table for the day(s) on which sampling/monitoring was conducted; and

2. The moon phase (in days after the new moon) for the day(s) on which sampling was conducted.

K. All monitoring instruments and devices used by the Discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy. All flow measurement devices shall be calibrated at least once per year, or more frequently, to ensure continued accuracy of the devices.

L. The Discharger shall have, and implement, an acceptable written quality assurance (QA) plan for laboratory analyses. Duplicate chemical analyses must be conducted on a minimum of ten percent of the samples or at least on sample per month, whichever is greater. A similar frequency shall be maintained for analyzing spiked samples. When requested by U.S. EPA or the Regional Water Board, the Discharger will participate in the NPDES discharge monitoring report QA performance study. The Discharger should have a success rate equal to or greater than 80 percent.

M. Analysis for pollutants with effluent limitations based on water quality objectives of the California Ocean Plan (2005) shall be conducted in accordance with procedures described in Attachment E of Order R9-2006-0043.

N. Toxicity Provisions

1. Chronic toxicity monitoring shall be conducted in accordance with procedures described in Attachment E of Order R9-2006-0043.

2. Toxicity Reopener

   This permit may be modified in accordance with the requirements set forth at 40 CFR Parts 122 and 124 to include appropriate conditions or limits to address demonstrated effluent toxicity based on newly available information, or to implement any U.S. EPA approved new state water quality standards applicable to effluent toxicity.

3. Monitoring results shall be reported at intervals and in a manner specified in Order R9-2006-0043 or in this MRP.

4. Revisions of Monitoring and Reporting Program by the Regional Water Board are appropriate to ensure that the Discharger is in compliance with requirements and provisions contained in this Order. Revisions may be made by the Regional Water Board at any time during the term of this Order, and may include a reduction or increase in the number of parameters to be monitored, the frequency of monitoring, or the number and size of samples collected.

II. Monitoring Locations

The Discharger shall establish the monitoring locations as specified in Table **C-1** to assess compliance with the effluent limitations, discharge specifications, and other requirements in this Order.

Table C-1. Monitoring Locations

Discharge Point Name	Discharge Point	Monitoring Location Name	Monitoring Location Description (include Latitude and Longitude when available)
Receiving Water	--	--	All receiving water samples shall be collected at monitoring stations as described by Attachment X of this Order.
Cooling Water Intake	--	M-INT	32deg 57min N, 117deg 16min W
Combined Discharge	001	M-001	33deg 08min 17sec N, 117deg 20min 22sec W
Metal Cleaning Treatment Facility	001-A	M-001-A	Flow is monitored in the wastewater treatment tank area (F-6 of 137292 S-451)
Chemical Cleaning	001-A1	M-001-A	Flow is monitored in the wastewater treatment tank area (F-6 of 137292 S-451)
Air Heater Wash	001-A2	M-001-A	Flow is monitored in the wastewater treatment tank area (F-6 of 137292 S-451)
Boiler Wash	001-A3	M-001-A	Flow is monitored in the wastewater treatment tank area (F-6 of 137292 S-451)
Hypochlorinator Wash	001-A4	M-001-A	Flow is monitored in the wastewater treatment tank area (F-6 of 137292 S-451)
Seepage and Groundwater Pumping	001-B	M-001-B	Unit 4 flow is monitored in the basement of Unit 4 (K-14 of 137292 S-451); Unit 5 flow is monitored in the basement of Unit 5 (K-16 of 137292 S-451)
Boiler Blowdown	001-C	M-001-C	Units 1 through 5 flow values are estimated based on valve flow rates. These valves are located within each unit's boiler equipment (K-10, K-12, K-14, and K-16 of 137292 S-451, respectively)
Freshwater R.O. Brine	001-D	M-001-D	Flow is monitored at the Reverse Osmosis area (H-16 of 137292 S-451)
Seawater R.O. Brine	001-E	M-001-E	Not discharging this stream at this time as the exact location of the proposed system is yet to be determined. Prior to commencement of discharge, Discharger will notify the Regional Water Board of the exact location compliance will be determined.
Fuel Line/Tank Hydrotest	001-F	M-001-F	Flow is monitored in the wastewater treatment tank area (F-6 of 137292 S-451) or at the offshore marine terminal located at 33deg 07.8min N, 118deg 20.8min W
Pilot Desalination Plant	001-G	M-001-G	The combined pilot plant discharge shall be monitored from the discharge pipe just above the ramp to the discharge pond.
Low Volume Waste Treatment Facility	001-H	M-001-H	Flow is monitored in the wastewater treatment tank area (F-6 of 137292 S-451)
Stormwater	001-I	M-001-I	Flows are sampled and monitored in various locations as depicted in 137292 S-451, Stormwater Pollution Prevention Plan drawing.

III. Influent Monitoring Requirements

A. Cooling Water Intake

1. The Discharger shall annually measure bar rack approach velocity and sediment accumulation at the intake structure and shall submit to the Regional Water Board an annual summary describing any operational difficulties at the intake structure or the bar rack. The Discharger shall also discuss preventative maintenance and corrective measures take to assure intake water velocities are as close as practical to design levels.

2. The Discharger shall monitor the main condenser inflow of cooling water at Monitoring Location M-INT as specified in Table C-2.

Table C-2. Intake Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Reporting Frequency
Temperature	ºF	--	continuous	monthly
Total Suspended Solids	mg/L	grab	continuous	monthly
Turbidity	NTU	grab	monthly	monthly
pH	standard units	grab	monthly	monthly

IV. Effluent Monitoring Requirements

A. Combined Discharge (Discharge Point 001)

1. Samples of the combined discharge through Discharge Point 001 shall be collected at Monitoring Location M-001 and analyzed as specified in Table C-3.

Table C-3. Effluent Monitoring Requirements (Discharge Point 001)

Parameter	Units	**Sample Type**	**Minimum Frequency of Analysis**	**Reporting Frequency**
Flow	mgd	meter or estimate	continuous	monthly
Temperature (Avg. and Max. Daily)	ºF	measurement	once every 2 hours	monthly
pH	standard units	grab	monthly	monthly
Turbidity	NTU	grab	monthly	monthly
Total Chlorine Residual[1/]	µg/L	grab	weekly	monthly
Total Chlorine Residual[2/]	µg/L	grab	annually	annually
Chronic Toxicity (General)[3/]	TUc	composite	semiannually	semiannually
Chronic Toxicity (Metal Cleaning)[4/]	TUc	composite	as needed	annually
Total Suspended Solids	mg/L	grab	monthly	monthly

Parameter	Units	Sample Type	Minimum Frequency of Analysis	Reporting Frequency
Arsenic	µg/L	grab	semiannually	semiannually
Cadmium	µg/L	grab	semiannually	semiannually
Chromium (Hexavalent)	µg/L	grab	semiannually	semiannually
Copper	µg/L	grab	semiannually	semiannually
Lead	µg/L	grab	semiannually	semiannually
Mercury	µg/L	grab	semiannually	semiannually
Nickel	µg/L	grab	semiannually	semiannually
Selenium	µg/L	grab	semiannually	semiannually
Silver	µg/L	grab	semiannually	semiannually
Zinc	µg/L	grab	semiannually	semiannually
Cyanide	µg/L	grab	semiannually	semiannually
Ammonia	µg/L	grab	semiannually	semiannually
Non-Chlorinated Phenolic Compounds	µg/L	grab	semiannually	semiannually
Chlorinated Phenolic Compounds	µg/L	grab	semiannually	semiannually
Endosulfan	µg/L	grab	semiannually	semiannually
Endrin	µg/L	grab	semiannually	semiannually
HCH	µg/L	grab	semiannually	semiannually

B. Metal Cleaning Wastes (Discharge Point 001-A)

1. Chemical and non-chemical metal cleaning waste streams shall be sampled at Monitoring Locations M-001-A and analyzed as specified in Table C-4.

Table C-4. Effluent Monitoring Requirements (Discharge Point 001-A)

Parameter	Units	Sample Type	Minimum Frequency of Analysis	Reporting Frequency
Flow	mgd	meter or estimate	monthly	monthly
pH	standard units	grab	prior to discharge	monthly
Total Suspended Solids (TSS)	mg/L, lbs/day	grab	prior to discharge	monthly
Oil and Grease	mg/L, lbs/day	grab	prior to discharge	monthly
Total Copper	mg/L, lbs/day	grab	prior to discharge	monthly
Total Iron	mg/L, lbs/day	grab	prior to discharge	monthly

C. Combined Low Volume Wastewaters (Discharge Points 001-B through 001-H)

1. Low volume wastewaters (Discharge Points 001-B through 001-H) shall be sampled at Monitoring Locations M-001-B through M-001-H and analyzed as specified in Table C-5. Reported values shall result from individual grab samples of low volume waste streams that are collected and composited on a flow-weighted basis. Measurements or estimates of flows of individual low volume waste streams used as a basis for compositing shall include as many wastewaters as possible. The flow rate used to determine the proportion of each waste stream in the composited sample shall be the actual (preferred) or estimated flow rate for the day on which samples are collected.

Table C-5. Effluent Monitoring Requirements (Discharge Points 001-B through 001-H)

Parameter	Units	**Minimum Frequency of Analysis**	**Reporting Frequency**
pH	standard units	monthly	monthly
Total Suspended Solids (TSS)	mg/L	monthly	monthly
	lbs/day	monthly	monthly
Oil and Grease	mg/L	monthly	monthly
	lbs/day	monthly	monthly
Arsenic	lbs/day	semiannually	semiannually
Cadmium	lbs/day	semiannually	semiannually
Chromium (Hexavalent)	lbs/day	semiannually	semiannually
Copper	lbs/day	semiannually	semiannually
Lead	lbs/day	semiannually	semiannually
Mercury	lbs/day	semiannually	semiannually
Nickel	lbs/day	semiannually	semiannually
Selenium	lbs/day	semiannually	semiannually
Silver	lbs/day	semiannually	semiannually
Zinc	lbs/day	semiannually	semiannually
Cyanide	lbs/day	semiannually	semiannually
Ammonia	lbs/day	semiannually	semiannually
Non-Chlorinated Phenolic Compounds	lbs/day	One time during the permit period	As part of the renewal application in 2010
Chlorinated Phenolic Compounds	lbs/day	One time during the permit period	As part of the renewal application in 2010
Endosulfan	lbs/day	One time during the permit period	As part of the renewal application in 2010
Endrin	lbs/day	One time during the permit period	As part of the renewal application in 2010
HCH	lbs/day	One time during the permit period	As part of the renewal application in 2010
Acrolein	lbs/day	One time during the permit period	As part of the renewal application in 2010
Antimony	lbs/day	One time during the permit period	As part of the renewal application in 2010
Bis(2-chloroethoxyl) methane	lbs/day	One time during the permit period	As part of the renewal application in 2010
Bis(2-chloroisopropyl) ether	lbs/day	One time during the permit period	As part of the renewal application in 2010

Parameter	Units	**Minimum Frequency of Analysis**	**Reporting Frequency**
Chlorobenzene	lbs/day	One time during the permit period	As part of the renewal application in 2010
Chromium III	lbs/day	One time during the permit period	As part of the renewal application in 2010
Di-n-butly phthalate	lbs/day	One time during the permit period	As part of the renewal application in 2010
Dichlorobenzenes	lbs/day	One time during the permit period	As part of the renewal application in 2010
Diethyl phthalate	lbs/day	One time during the permit period	As part of the renewal application in 2010
Dimethyl phthalate	lbs/day	One time during the permit period	As part of the renewal application in 2010
4,6-dinitro-2-methylphenol	lbs/day	One time during the permit period	As part of the renewal application in 2010
2,4-dinitrophenol	lbs/day	One time during the permit period	As part of the renewal application in 2010
Ethylbenzene	lbs/day	One time during the permit period	As part of the renewal application in 2010
Fluoranthene	lbs/day	One time during the permit period	As part of the renewal application in 2010
Hexachlorocyclopentadine	lbs/day	One time during the permit period	As part of the renewal application in 2010
Nitrobenzene	lbs/day	One time during the permit period	As part of the renewal application in 2010
Thallium	lbs/day	One time during the permit period	As part of the renewal application in 2010
Toluene	lbs/day	One time during the permit period	As part of the renewal application in 2010
1,1,1-trichloroethane	lbs/day	One time during the permit period	As part of the renewal application in 2010
Tributyltin	lbs/day	One time during the permit period	As part of the renewal application in 2010
Acrylonitrile	lbs/day	One time during the permit period	As part of the renewal application in 2010
Aldrin	lbs/day	One time during the permit period	As part of the renewal application in 2010
Benzene	lbs/day	One time during the permit period	As part of the renewal application in 2010
Benzidine	lbs/day	One time during the permit period	As part of the renewal application in 2010
Beryllium	lbs/day	One time during the permit period	As part of the renewal application in 2010
Bis(2-chloroethyl) ether	lbs/day	One time during the permit period	As part of the renewal application in 2010
Bis(2-ethylhexyl) phthalate	lbs/day	One time during the permit period	As part of the renewal application in 2010
Carbon tetrachloride	lbs/day	One time during the permit period	As part of the renewal application in 2010
Chlordane	lbs/day	One time during the permit period	As part of the renewal application in 2010
Chlorodibromomethane	lbs/day	One time during the permit period	As part of the renewal application in 2010
Chloroform	lbs/day	One time during the permit period	As part of the renewal application in 2010
DDT	lbs/day	One time during the permit period	As part of the renewal application in 2010
1,4-dichlorobenzene	lbs/day	One time during the permit period	As part of the renewal application in 2010
3,3'-dichlorobenzidine	lbs/day	One time during the permit period	As part of the renewal application in 2010
1,2-dichloroethane	lbs/day	One time during the permit period	As part of the renewal application in 2010

Parameter	Units	**Minimum Frequency of Analysis**	**Reporting Frequency**
1,1-dichloroethylene	lbs/day	One time during the permit period	As part of the renewal application in 2010
Dichlorobromomethane	lbs/day	One time during the permit period	As part of the renewal application in 2010
Dichloromethane	lbs/day	One time during the permit period	As part of the renewal application in 2010
1,3-dichloropropene	lbs/day	One time during the permit period	As part of the renewal application in 2010
Dieldrin	lbs/day	One time during the permit period	As part of the renewal application in 2010
2,4-dinitrotoluene	lbs/day	One time during the permit period	As part of the renewal application in 2010
1,2-diphenylhydrazine	lbs/day	One time during the permit period	As part of the renewal application in 2010
Halomethanes	lbs/day	One time during the permit period	As part of the renewal application in 2010
Heptachlor	lbs/day	One time during the permit period	As part of the renewal application in 2010
Heptachlor epoxide	lbs/day	One time during the permit period	As part of the renewal application in 2010
Hexachlorobenzene	lbs/day	One time during the permit period	As part of the renewal application in 2010
Hexachlorobutadiene	lbs/day	One time during the permit period	As part of the renewal application in 2010
Hexachloroethane	lbs/day	One time during the permit period	As part of the renewal application in 2010
Isophorone	lbs/day	One time during the permit period	As part of the renewal application in 2010
N-nitrosodimethylamine	lbs/day	One time during the permit period	As part of the renewal application in 2010
N-nitrosodi-N-propylamine	lbs/day	One time during the permit period	As part of the renewal application in 2010
N-nitrosodiphenylamine	lbs/day	One time during the permit period	As part of the renewal application in 2010
PAHs	lbs/day	One time during the permit period	As part of the renewal application in 2010
PCBs	lbs/day	One time during the permit period	As part of the renewal application in 2010
TCDD Equiv.	lbs/day	One time during the permit period	As part of the renewal application in 2010
1,1,2,2-tetrachloroethane	lbs/day	One time during the permit period	As part of the renewal application in 2010
Tetrachloroethylene	lbs/day	One time during the permit period	As part of the renewal application in 2010
Toxaphene	lbs/day	One time during the permit period	As part of the renewal application in 2010
Trichloroethylene	lbs/day	One time during the permit period	As part of the renewal application in 2010
1,1,2-trichloroethane	lbs/day	One time during the permit period	As part of the renewal application in 2010
2,4,6-trichlorophenol	lbs/day	One time during the permit period	As part of the renewal application in 2010
Vinyl chloride	lbs/day	One time during the permit period	As part of the renewal application in 2010

V. Whole Effluent Toxicity Testing Requirements

A. Chronic Toxicity Monitoring

The Discharger shall conduct semiannual toxicity tests on 24-hour composite effluent samples. Testing shall be performed using methods outlined in "Chapman, G.A., D.L. Denton, and J.M. Lazorchak. 1995. Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms" or SWRCB 1996. Procedures Manual for Conducting Toxicity Tests Developed by the Marine Bioassay Project. 96-1WQ."

Combined discharge samples shall be taken during a period when low volume wastes are being discharged. Samples shall be taken at the NPDES sampling location of the combined discharge identified in Section II of this MRP. At the time of the first toxicity test immediately following adoption of this Order, the Discharger shall conduct toxicity tests with an invertebrate, *Haliotis rufescens*, a plant, *Macrocystis pyrifera*, and a vertebrate, *Atherinops Affins*. After this screening period, monitoring will be conducted on the most sensitive species. Every two years the Discharger shall re-screen to determine the most sensitive species. This screening shall be performed during a different month that the previous species screenings. The most sensitive species shall then be used for continued monitoring.

At least five concentrations of effluent (one concentration must bracket the initial dilution on 10% effluent) plus one control shall be tested. A minimum of four replicates is required per concentration. The effluent tests must be conducted with concurrent reference toxicant tests. Both the reference toxicant and effluent tests must meet all test acceptability criteria as specified in the chronic toxicity manuals. If the test acceptability criteria are is not achieved, the Discharger must re-sample and re-test within 14 days.

The summary report submitted to the Regional Water Board must follow the guidelines specified in Chapter 10 of Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms. Sections 10.2 and 10.3.2 of that chapter are not required.

Compliance shall be determined from TUc, which equals 100/NOEC. NOEC (No Observed Effect Concentration) is the highest concentration of toxicant, in terms of percent effluent, to which the test organisms are exposed that causes no observable adverse effect. The chronic toxicity limitation is: 1) a monthly median expressed as 10 TUc or 2) any one test that demonstrates a 50% toxic effect.

B. Implementation of Chronic Toxicity Limitations

If the results of a chronic toxicity test exceed the limitations specified in this Order, the Discharger shall:

1. Take all reasonable measures necessary to immediately minimize toxicity; and

2. Increase the frequency of the toxicity test(s) that violated the effluent limitation to least two times per month until the results of at least three consecutive toxicity tests

meet the required standard. Re-sampling should occur under conditions that mimic the conditions of the initial non-compliant toxicity test.

If the Regional Water Board determines that toxicity testing shows a consistent violation of the limitations specified in this Order, the Discharger shall conduct a Toxicity Reduction Evaluation (TRE), which includes all reasonable steps to identify the source of the toxicity. Once the source of the toxicity is identified, upon Regional Water Board request, the Discharger shall take all reasonable steps to reduce the toxicity to meet the toxicity limitations contained in this Order. The TRE shall be conducted based on the procedures established by the U.S. EPA in guidance manuals EPA/600/6-91/005F (Phase I), EPA/600/R-92/080 (Phase II), and EPA/600/R-92/081 Phase III, and EPA/600/2-88/070 (TRE protocols for industrial discharges).

Within 14 days of the TRE, the Discharger shall submit the results of the TRE, including a summary of the findings, data generated, a list of corrective actions necessary to achieve consistent compliance with this Order and prevent all future violations, and a time schedule for implementation of such corrective actions. The corrective actions and time schedule shall be modified at the discretion of the Regional Water Board.

VI. Receiving Water Monitoring Requirements

Receiving water and kelp monitoring shall be conducted as specified below. Sampling, sampling preservation, and analysis, when not specified, shall be by methods approved by the Regional Water Board.

Dispersion Area Stations: There are 10 stations located on three transects in the dispersion area. The transects shall be established normal to the shore. Transects and stations shall be located and numbered as specified in Table C-6.

Table C-6. Dispersion Area Stations

Transect (Description)	Station	Description
C (1000 feet upcoast (northerly) of the discharge channel)	C-10	521 feet offshore
	C-20	956 feet offshore
	C-30	2000 feet offshore
D (Discharge channel)	D-10	565 feet offshore
	D-20	1129 feet offshore
	D-30	1600 feet offshore
	D-50	2800 feet offshore
E (1000 feet downcoast (southerly) of the discharge channel)	E-10	652 feet offshore
	E-20	1086 feet offshore
	E-30	2000 feet offshore

Reference Area Stations: There are four stations located on a transect in the reference area. The transect shall be established normal to the shore. The transect and stations shall be located and numbered as specified in Table C-7.

Table C-7. Reference Area Stations

Transect (Description)	Station	Description
A (7000 feet upcoast (northerly) of the discharge channel)	A-10	At 10 foot depth (-10 ft MLLW)
	A-20	At 20 foot depth (-20 ft MLLW)
	A-30	At 30 foot depth (-30 ft MLLW

Transect (Description)	Station	Description
	A-50	3400 feet offshore

A. Dispersion and Reference Area Stations

1. The Discharger shall monitor the Pacific Ocean at stations A-10, A-20, A-30, A-50, C-10, C-20, C-30, D-10, D-20, D-30, D-50, E-10, E-20, and E-30 as specified in Table C-8.

Table C-8. Dispersion and Reference Area Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	**Reporting Frequency**
Light Transmittance (Secchi disk)	feet	--	semiannually	semiannually
Dissolved oxygen	mg/L	grab	semiannually	semiannually
pH	standard units	grab	semiannually	semiannually

2. The thermal plume shall be characterized via infrared mapping on a semiannual basis.

The report for items monitored at receiving water monitoring stations and thermal plume characterization shall include an in-depth discussion of the results of the surveys. The discussion shall compare data from the reference station(s) with data from the stations located in the area of the discharge and shall note compliance with objectives found in this order and the Ocean Plan. The report shall include a description of the methods and equipment used to obtain the data.

B. Kelp Bed Monitoring

Kelp bed monitoring is conducted to assess the extent to which the discharge of wastes may affect the areal extent and the health of the coastal kelp beds.

The Discharger shall participate with other ocean dischargers in the San Diego Region in an annual regional kelp bed photographic survey. Kelp beds shall be monitored annually by means of vertical aerial infrared photography to determine the maximum areal extent of the region's coastal kelp beds within the calendar year. Surveys shall be conducted as close as possible to the time when kelp bed canopies cover the greatest area, which ordinarily occurs in August or September in the San Diego Region. The entire San Diego Region, from the International Boundary to the San Diego/Santa Ana Regional boundary shall be photographed on the same day. The date of each annual survey shall be approved by the Regional Water Board. (Verbal approval will be sufficient, so that the survey will not be delayed, while written approval is prepared and distributed.)

The images produced by the surveys shall be presented in the form of a 1:24,000 scale photo-mosaic of the entire San Diego Region coastline. Onshore reference points, locations of all ocean outfalls and diffusers, and the 30-foot (MLLW) and 60-foot (MLLW) depth contours shall be shown.

The areal extent of the various kelp beds photographed in each survey shall be compared to that noted in surveys of previous years. Any significant losses which persist for more than one year shall be investigated by divers to determine the probable reason for the loss.

VII. Other Monitoring Requirements

A. In addition to the Core (Intake, Effluent, and Receiving Water Monitoring) requirements, the Discharger shall comply with the following monitoring requirements:

1. Regional Watershed/Ocean Monitoring

   The Discharger shall participate and coordinate with state and local agencies and other dischargers in the San Diego Region in development and implementation of a regional watershed or ocean monitoring program for the Pacific Ocean as directed by the Regional Water Board. The intent of a regional monitoring program is to maximize the efforts of all monitoring partners using a more cost-effective monitoring design and to best utilize the pooled resources of the region. During the coordinated monitoring effort, the Discharger's monitoring program may be expanded to provide a regional assessment of the impact of discharges to the watershed or Pacific Ocean.

2. Special Studies

   Special studies are intended to be short-term and designed to address specific research or management issues that are not addressed be the routine core monitoring program. The Discharger shall implement special studies as directed by this Regional Water Board. This includes conducting and implementing a *Comprehensive Demonstration Study* as required by the CWA Section 316(b) Phase II Rule (40 CFR 125.91). The Study is due no later than January 9, 2008.

VIII. Reporting Requirements

A. General Monitoring and Reporting Requirements

The Discharger shall comply with all *State and Federal Standard Provisions* (Attachment D) related to monitoring, reporting, and recordkeeping.

B. Self Monitoring Reports (SMRs)

1. At any time during the term of this permit, the State or Regional Water Board may notify the Discharger to electronically submit self-monitoring reports. Until such notification is given, the Discharger shall submit self-monitoring reports in accordance with the requirements described below.

2. The Discharger shall submit monthly, semiannual, and annual Self Monitoring Reports including the results of all required monitoring using USEPA-approved test methods or other test methods specified in this Order. Monthly reports shall be due on the 1st day of the second month following the end of each calendar month; Quarterly reports shall be due on May 1, August 1, November 1, and February 1 following each calendar quarter; Semi-annual reports shall be due on August 1 and February 1 following each semi-annual period; Annual reports shall be due on February 1 following each calendar year.

3. Monitoring periods and reporting for all required monitoring shall be completed according to the schedule specified in Table C-9.

Table C-9. Monitoring and Reporting Schedule

Sampling Frequency	Monitoring Period Begins On…	Monitoring Period	SMR Due Date
Continuous	October 1, 2006	All	First day of second calendar month following month of sampling
Monthly	October 1, 2006	1st day of calendar month through last day of calendar month	First day of second calendar month following month of sampling
Quarterly	October 1, 2006	January 1 through March 31 April 1 through June 30 July 1 through September 30 October 1 through December 31	May 1 August 1 November 1 February 1
Semiannually	October 1, 2006	January 1 through June 30 July 1 through December 31	August 1 February 1
Annually	October 1, 2006	January 1 through December 31	February 1

4. The Discharger shall report with each sample result the applicable Minimum Level (ML) and the current Method Detection Limit (MDL), as determined by the procedure in 40 CFR Part 136.

5. The Discharger shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with interim and/or final effluent limitations.

6. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations of the WDRs; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation.

7. Other reports, as required by this Order, shall be submitted to the Regional Water Board according to the following schedule:

   a. *Proposal for Information Collection* regarding Clean Water Act Section 316(b) *Comprehensive Demonstration Study* will be due no later than 180 days after the effective date of this Order.

   b. Clean Water Act 316(b) *Comprehensive Demonstration Study* will be due no later than January 9, 2008.

c. The Receiving Water Monitoring Report is due by August 1 of each year flowing the previous calendar year's receiving water monitoring activity.

8. Self Monitoring Reports, signed and certified as required by Attachment D of this Order, must be must be reported on forms approved by the Regional Water Board and submitted to the following address:

   Industrial Compliance Unit
   California Regional Water Quality Control Board
   San Diego Region
   9174 Sky Park Court, Suite 100
   San Diego, CA 92123-4340

C. Discharge Monitoring Reports (DMRs)

1. As described in Section X.B.1 above, at any time during the term of this permit, the State or Regional Water Board may notify the discharger to electronically submit self-monitoring reports. Until such notification is given, the Discharger shall submit discharge monitoring reports (DMRs) in accordance with the requirements described below.

2. DMRs must be signed and certified as required by the standard provisions (Attachment D). The Discharge shall submit the original DMR and one copy of the DMR to the address listed below:

   State Water Resources Control Board
   Discharge Monitoring Report Processing Center
   Post Office Box 671
   Sacramento, CA 95812

3. All discharge monitoring results must be reported on the official USEPA pre-printed DMR forms (EPA Form 3320-1). Forms that are self-generated or modified cannot be accepted.